

Title (en)
TANGENTIAL FLOW PERFUSION SYSTEM

Title (de)
TANGENTIALFLUSS-PERFUSIONSSYSTEM

Title (fr)
SYSTÈME DE PERFUSION À ÉCOULEMENT TANGENTIEL

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Abstract (en)
[origin: WO2014051503A1] The invention discloses a system for perfusion culture of cells which comprises: a bioreactor; a filter unit with a retentate inlet end, a retentate outlet end and a permeate outlet port; a reciprocating pump fluidically connected to the retentate inlet end, with the retentate inlet end fluidically connected to the bioreactor via an inlet check valve arranged to allow flow in the direction from the bioreactor to the retentate inlet end and to block flow in the reverse direction, and where the retentate outlet end is fluidically connected to the bioreactor via an outlet check valve arranged to allow flow in the direction from the retentate outlet end to the bioreactor and to block flow in the reverse direction; and where the inlet and outlet check valves are each fluidically connected to a tubing branch point, which is further connected to the bioreactor via a length of tubing. In an alternative embodiment, each of said inlet and outlet check valves is fluidically connected to the bioreactor via separate lengths of tubing. The invention further discloses a pre-sterilized system for perfusion culture of cells which comprises: a bioreactor; a reciprocating pump and a filter unit fluidically connected to the reciprocating pump and fluidically connected to the bioreactor via at least one aseptic connector.

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